Best Management Practices

MISSOURI DEPARTMENT OF CONSERVATION

Niangua Darter

Etheostoma nianguae

Common name • Niangua Darter
Scientific name • *Etheostoma nianguae*
Federal status • Threatened
State status • Endangered

Ecology

Niangua darters are endemic only to southcentral Missouri. They inhabit clear upland creeks and small- to medium-sized rivers with slight to moderate currents. They require continuously flowing streams with silt-free gravel and rock bottoms. Niangua darters are found most of the year in shallow pools, margins, and stream runs. Prior to spawning, they move from pools and slow runs to gravel riffles. The spawning season runs from mid-March to early June, but most of the breeding occurs in April. Adults are commonly 2.6-4.4 inches in length. Niangua darters eat the nymphs of stoneflies and mayflies and other aquatic insects.

Reasons for Decline

The Niangua darter has never been abundant nor widespread in distribution. Although historically it occurred in several rivers throughout southcentral Missouri, most populations have been declining for the past several decades or have already disappeared. Declines in Niangua darter numbers are primarily due to habitat loss from reservoir and bridge construction, stream channelization, and increased sediment in streams. Current threats to Niangua darters include improper and untimely gravel and sand removal, loss of stream side vegetation, fertilizer and pesticide run-off, increased nutrification from livestock and human waste, and increased competition and predation from introduced fish species.

Specific Recommendations

The Niangua darter is a valuable indicator species because it appears to be quite sensitive to changes in stream habitat. Local Niangua darter populations are quick to respond to stream degradation, especially increases in silt and nutrient loads. Practices that stabilize and improve Niangua darter habitat will benefit numerous other aquatic species.

→ Project activities should not occur below the high bank of the stream between March 15 and June 15.
→ Sheet piling used to construct coffer dams for bridge piers may be placed after June 15 and should be removed before the following March 15. Removal of the sheet piling should be coordinated with appropriate Missouri Department of Conservation personnel.
→ Dams and impoundment structures should not be constructed in streams where this species occurs.

General Recommendations

Refer to Management Recommendations for Construction Projects Affecting Missouri Streams and Rivers.

Information Contacts

For further information regarding regulations for development in rivers and streams, contact:

Missouri Department of Conservation
Policy Coordination Section
P.O. Box 180
2901 W. Truman Blvd
Jefferson City, MO 65102-0180
Telephone: 573/751-4115

Missouri Department of Natural Resources
Division of Environmental Quality
P.O. Box 176
Jefferson City, MO 65102-0176
Telephone: 573/526-3315

U.S. Army Corps of Engineers
Regulatory Branch
700 Federal Building
Kansas City, MO 64106-2896
Telephone: 816/983-3990

U.S. Environmental Protection Agency
Water, Wetlands, and Pesticides Division
901 North 5th Street
Kansas City, KS 66101
Telephone: 913/551-7307

U.S. Fish and Wildlife Service
Ecological Services Field Office
608 E. Cherry Street, Room 200
Columbia, MO 65201
Telephone: 573/876-1911

Disclaimer

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